SC/QC/110V-Y1/2021-22-2/C1 Date: 02-05-2022

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C R Projects , Channa Reddy, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	161 min	Shall not be less than 30 min
2	Final setting time	275 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.18%	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	2.06mm	Shall not be more than 10 mm
5	Compressive strength a) 3 days (average of three results)	28.75 N/Sq mm	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Balaji Layout 1st Main Ch: 49.00m to 89.00m

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22-2/PCC1 Date: 02-05-2022

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	65.45	0 -20	30- 70
10mm	31.80	0 -5	10- 35
4.75mm	4.15	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	96.30	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	82.25	60-95	75-100	85-100	
01.18	71.05	30-70	55-90	75-100	
600 mic	45.80	15-34	35-59	60-79	
300 mic	24.15	5-20	8-30	12-40	
150 mic	6.75	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Balaji Layout 1st Main Ch: 49.00m to 89.00m

AE-02

A.E.E

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SC/QC/110V-Y1/2021-22-2/PCC2 Date: 04-05-2022

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	64.75	0 -20	30- 70
10mm	28.15	0 -5	10- 35
4.75mm	3.95	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	97.15	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	83.45	60-95	75-100	85-100	
01.18	71.25	30-70	55-90	75-100	
600.mic	48.30	15-34	35-59	60-79	
300.mic	22.15	5-20	8-30	12-40	
150.mic	6.45	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Balaji Layout 1st Main Ch: 149.50m to 179.50m

AE-01

A.E.E

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SC/QC/110V-Y1/2021-22-2/C3 **Date: 06-05-2022**

1. TEST REPORT ON CEMENT:

Sub: Testing of 53 Grade Cement Sample (IS 12269-1987).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

PHYSICAL TESTS ON CEMENT

Grade * : 53,
Type * : O.P.C

TABLE 1.1:

SL No	Name of Test	Test Results	Requirements as per IS 8112-1989
1	Initial setting time	158 min	Shall not be less than 30 min
2	Final setting time	270 min	Shall not be more than 600 min
3	Fineness (by dry sieving on IS 90 micron sieve)	2.18%	Not to exceed 10.0%
4	Soundness test(by Le-Chatelier's method)	2.04 mm	Shall not be more than 10 mm
5	Compressive strength c) 3 days (average of three results)	28.65 N/Sq mm	Shall not be less than 27 N/Sqmm

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: 1st Main From 8th cross Ch: 0.00m to 23.80m

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SC/QC/110V-Y1/2021-22-2/PCC3 Date: 06-02-2022

1. TESTING OF COARSE AND FINE AGGREGATES:

Sub: Testing of Coarse and Fine aggregates to be used for bed concrete.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. COARSE AGGRGATES TABLE - SIEVE ANALYSIS:

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2007) % Passing	
	40 mm Sample	Single size	Graded
40mm	100.00	85-100	90 – 100
20mm	64.70	0 -20	30- 70
10mm	31.25	0 -5	10- 35
4.75mm	4.05	------	0- 5

2. FINE AGGREGATES TABLE - SIEVE ANALYSIS

IS Sieve Size, mm	Percentage Passing	Specification as Per IS: 383-1970(Reaffirmed 2002) Percentage Passing			Remarks
		Zone-I	Zone-II	Zone -III	
04.75	97.20	90-100	90-100	90-100	The Sample Conforms to Grading **Zone-II**
02.36	81.45	60-95	75-100	85-100	
01.18	70.65	30-70	55-90	75-100	
600.mic	44.80	15-34	35-59	60-79	
300.mic	22.35	5-20	8-30	12-40	
150.mic	6.10	0-10	0-10	0-10	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: 1st Main From 8th cross Ch: 0.00m to 23.80m

AE

Page No. 1/1,

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SC/QC/110V-Y1/2021-22-2/CA1 Date: 07-05-2022

1. TESTING OF COARSE AGGREGATES (20 mm):

Sub: Testing of Construction Materials.

{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }

Ref.: Material testing/PMC/21-22,

Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.

Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

Table - 1.1 : SIEVE ANALYSIS :

IS Sieve Size, mm	Percentage passing	Requirements as per IS 383-1970 (Reaffirmed on 2002) % Passing	
	20 mm Sample	Single size	Graded
40 mm	100.00	100 00	100 00
20 mm	98.25	85-100	90 - 100
10 mm	45.60	0 - 20	25 - 55
4.75 mm	3.95	0 - 5	0 - 10

TABLE 1.2 :

SL No	Test conducted	Results	Requirements as per IS 383-1970 & Tests Conforms to IS 2386(Part I to IV) – 1963 (Reaffirmed on 2002)
1	Flakiness Index	27.56%	Not to exceed 25 %
2	Crushing value	28.79%	Not to exceed 45 % for concrete other than for wearing surfaces and 30% for concrete for wearing surfaces

The result of the materials tested meets the standards and hence can be used for the work.

Sample Collected Site: Synik vihar Layout 11th Main Ch: 120.00m to 134.90m

AE-II

A.E.E

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SC/QC/110V-Y1/2021-22-2/S1 Date: 07-05-2022

1. TEST REPORT ON REINFORCEMENT STEEL:

Sub: Testing of Reinforcement Steel of diameter 10 and 12 mm **TMT Steel.**
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TABLE – 1

	Details	For 10 mm		For 12 mm	
		Test Results	Min Req as per IS 1786-2008	Test Results	Min Req as per IS 1786-2008
	Observed diameter of bar	**10.0 mm**	10.0 mm	**12.0 mm**	12.0 mm
	Observed Wt/m Length **Kg/m**	**0.623**	0.567	**0.893**	0.834
	Proof stress/Yield stress, fy , **N/mm²**	**556.0**	500.0	**552.0**	500.0
	Bend/ Re bend Test	**Ok**	---	**Ok**	---
	Percentage of Elongation, %	**19.80**	12.00	**20.80**	12.00
	Ultimate Tensile Strength **N/mm²**	**645.0**	545.0	**639.0**	545.0

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Synik vihar Layout 11th Main

AE-02

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SC/QC/110V-Y1/2021-22-2/CB3 **Date: 17-05-2022**

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	10-05-22	17-05-22	07	22500	360	16.00	16.07
	002	"	"	"	"	355	15.78	
	003	"	"	"	"	370	16.44	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Balaji Layout From 8th cross Ch: 0.00m to 23.80m

AE-02

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22-2/CB4 Date: 19-05-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project* Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	12-05-22	19-05-22	07	22500	365	16.22	16.15
	002	"	"	"	"	370	16.44	
	003	"	"	"	"	355	15.78	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Synik vihar Layout 11th Main Ch: 90.00m to 120.00m

Page No. 1/1,

SILICON CONSULTING ENGINEERS

A.E.E

SC/QC/110V-Y1/2021-22-2/CB2A Date: 06-06-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	09-05-22	06-06-22	28	22500	515	22.89	**22.81**
	002	"	"	"	"	500	22.22	
	003	"	"	"	"	525	23.33	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Balaji Layout 1st Main Ch: 209.50m to 239.50m

AE-02

Page No. 1/1,

A.E.E

SILICON CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22-2/CB3A Date: 07-06-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project* Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	10-05-22	07-06-22	28	22500	525	23.33	**22.96**
	002	"	"	"	"	515	22.89	
	003	"	"	"	"	510	22.67	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Balaji Layout From 8th cross Ch: 0.00m to 23.80m

AE-02

A.E.E

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SC/QC/110V-Y1/2021-22-2/CB1A Date: 03-06-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project* Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{15}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	06-05-22	03-06-22	28	22500	400	17.78	18.30
	002	"	"	"	"	415	18.44	
	003	"	"	"	"	420	18.67	

The result of the materials tested meets the standards and hence can be used for the work.
Sample Collected Site: Synik vihar Layout 11th Main Ch: 184.70m to 212.00m

Page No. 1/1,

A.E.E

SILICON CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22-2/K1 Date: 18-05-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.38	23.45	23.22	As per Cl 6.2.2 of IS 456-2000, fcr=0.7√ fck
2	002	3.35	22.95		
3	003	3.37	23.30		

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.38	4.53
2	002	4.56	
3	003	4.65	

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik vihar Layout 11th Main Ch: 184.70m to 212.00m

AE-02

A.E.E

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CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22-2/K3 Date: 23-05-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.37	23.30	23.16	As per Cl. 6.2.2 of IS 456-2000, fcr=0.7√ fck
2	002	3.32	22.50		
3	003	3.40	23.70		

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.64	4.65
2	002	4.72	
3	003	4.59	

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik vihar Layout Ch: 204.80m to 224.60m

RE-02

SILICON CONSULTING ENGINEERS

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SC/QC/110V-Y1/2021-22-2/K4 Date: 26-05-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.28	21.94	22.63	As per Cl. 6.2.2 of IS 456-2000, fcr=0.7√ fck
2	002	3.32	22.55		
3	003	3.38	23.40		

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.93	4.85
2	002	4.75	
3	003	4.89	

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Balaji Layout 1st Cross Ch: 0.00m to 19.00m

AE-02

A.E.E

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SC/QC/110V-Y1/2021-22-2/K5 Date: 28-05-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.38	23.45	23.31	As per Cl 6.2.2 of IS 456-2000, fcr=0.7√ fck
2	002	3.34	22.90		
3	003	3.40	23.60		

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.56	4.53
2	002	4.43	
3	003	4.62	

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Balaji Layout 2nd Cross Ch: 18.80m to 30.50m

AE-02

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A.E.E

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CONSULTING ENGINEERS

SC/QC/110V-Y1/2021-22-2/K6 Date: 31-05-2022

TEST REPORT

Sub: Testing of Pre-cast Material-Kerb Stones.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

1. PHYSICAL TESTS ON KERB STONES :

Sl No.	Identification	Flexural strength, fcr in N/sqmm	Characteristic Compressive Strength, fck in N/sqmm	Avg. Characteristic. Compressive Strength fck in N/sqmm	Remarks
1	001	3.35	22.95	22.83	As per Cl. 6.2.2 of IS 456-2000, fcr=0.7√ fck
2	002	3.29	22.10		
3	003	3.39	23.45		

2. WATER ABSORPTION TEST

Sl No	Identification	Water absorption %	Average value %
1	001	4.72	4.61
2	002	4.48	
3	003	4.65	

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Balaji Layout 3rd Cross Ch: 13.00m to 43.00m

AE

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Date: 11-05-2022

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS 383-1970 & M.o.R.T.H Specification, V Revision -2013.
1.	Water absorption, %	**0.41 %**	Not more than 2.0 %
2.	Liquid Limit, %	**18.56**	Not more than 25.0 %
3.	Plasticity Index, %	**NP**	Not more than 6.0 %
4.	Moisture Content, %	**6.74**	----------
5.	Aggregate Impact Value, %	**28.89**	Not more than 40.00 %

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 11th Main Ch: 150.00m to 180.00m

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SC/QC/110V-Y1/2021-22-2/GSB3 Date: 12-05-2022

TEST REPORT ON GRANULAR SUBBASE MIX
(GRADATION TEST)

Sub: To conduct tests on GSB (Grade-V) mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

1. **Gradation Test:**
TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
75.00	100.00	100
53.00	95.45	80-100
26.50	83.30	55-90
9.50	56.25	35-65
4.75	43.80	25-50
2.36	17.35	10-20
0.85	8.65	2-10
0.425	3.45	0-5

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 8th Main Ch: 60.00m to 90.00m

AE-22

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SC/QC/110V-Y1/2021-22-2/W1

Date: 10-05-2022

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

1. Gradation Test:
TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	97.15	95-100
26.50	---	-
22.40	73.25	60-80
11.20	55.40	40-60
4.75	33.15	25-40
2.36	25.60	15-30
0.600	18.45	8-22
0.075	3.85	0-5

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 7th Main from end Ch: 90.00m to 120.00m

AEE-02

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SC/QC/110V-Y1/2021-22-2/W2

Date: 12-05-2022

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project* Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

1. Gradation Test:
TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	98.35	95-100
26.50	---	-
22.40	72.15	60-80
11.20	57.10	40-60
4.75	36.45	25-40
2.36	22.70	15-30
0.600	19.05	8-22
0.075	3.65	0-5

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 7th Main from end Ch: 180.00m to 210.00m

AE-02

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Date: 12-05-2022

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS 383-1970 & M o R T H Specification, V Revision -2013.
1.	Aggregate Impact Value	**27.56%**	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	**28.69 %**	Not more than 35.0 %
3.	Water absorption, %	**0.43 %**	Not more than 2.0 %
4.	Plasticity Index, %	**NP**	Not more than 6.0 %

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 7th Main from end Ch: 180.00m to 210.00m

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SC/QC/110V-Y1/2021-22-2/W4

Date: 18-05-2022

TEST REPORT ON WET MIX MACADAM MIX
(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

1. Gradation Test:
TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	98.45	95-100
26.50	---	-
22.40	72.15	60-80
11.20	56.25	40-60
4.75	34.90	25-40
2.36	21.05	15-30
0.600	18.25	8-22
0.075	3.50	0-5

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 5th Main Ch: 123.50m to 153.50m

AE-02

A.E.E

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SC/QC/110V-Y1/2021-22-2/W5 Date: 21-05-2022

TEST REPORT ON WET MIX MACADAM MIX

(GRADATION TEST)

Sub: To conduct Gradation test on Wet Mix Macadam (WMM) Mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

1. Gradation Test:
TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
53.00	100.00	100
45.00	98.15	95-100
26.50	---	-
22.40	72.35	60-80
11.20	58.90	40-60
4.75	34.55	25-40
2.36	22.35	15-30
0.600	17.90	8-22
0.075	3.55	0-5

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 6th main 5th cross cross Ch: 30.00m to 44.80m

AE-02

A.E.E

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Date: 23-05-2022

TABLE 1.2

SL No	Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M o.R.T.H Specification, V Revision -2013.
1.	Aggregate Impact Value	**27.46%**	Not more than 30.00 %
2.	Combined Flakiness and Elongation index, %	**28.39%**	Not more than 35.0 %
3.	Water absorption, %	**0.43%**	Not more than 2.0 %
4.	Plasticity Index, %	**NP**	Not more than 6.0 %

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Balaji Layout 2nd Main Ch: 30.00m to 60.00m.

Page No. 2/2

M.E.E

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SC/QC/110V-Y1/2021-22-2/BD1 **Date: 27-05-2022**

1. TEST REPORT ON BITUMEN SAMPLE:

Sub: Testing of Bitumen sample VG-30 Grade.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.
Technical Reference: Ministry of Road Transport and Highways, V Revision, 2013 and IS 73: 1992.

TABLE 1.1 ;

SL No	Details	Test Results	Requirements as per I.S 73 –1992 Specifications
1.	Penetration at 25^0 C	**52.70^0 C**	Min. 45
2.	Ductility Value at 25^0 C	**108.90 cm**	40
3.	Flash point	**247^0 C**	Minimum 220^0 C
4.	Softening point	**51.40^0 C**	Min. 47

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 11th Main Ch: 60.00m to 90.00m

AE-QC

Page No. 1/1,

A.E.E

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SC/QC/110V-Y1/2021-22-2/DS1

Date: 30-05-2022

1.TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for DBM mix sample.
{Project* Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

Table 1: Properties of DBM (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Dense Bituminous Macadam, Grade-2 as per M.o.R.T&H (IV Revision)-2001 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	**1248**	900
2	Marshall Flow at 60°C, mm.	**3.36**	2.0 - 4.0

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 8th Main Ch: 30.00m to 60.00m

AE

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SC/QC/110V-Y1/2021-22-2/BB1

Date: 28-05-2022

1. TEST REPORT ON BITUMEN SAMPLE:

Sub: Testing of Bitumen sample VG-30 Grade.
{Project*. Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.
Technical Reference: Ministry of Road Transport and Highways, V Revision, 2013 and IS 73: 1992.

TABLE 1.1 ;

SL No	Details	Test Results	Requirements as per I.S 73 –1992 Specifications
1.	Penetration at 25^0 C	**51.30^0 C**	Min. 45
2.	Ductility Value at 25^0 C	**108.0 cm**	40
3.	Flash point	**236^0 C**	Minimum 220^0 C
4.	Softening point	**50.20^0 C**	Min. 47

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 7th Main from end Ch: 60.00m to 90.00m

A.E.E

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QC/110V-Y1/2021-22-2/CB1 **Date: 28-05-2022**

EST REPORT ON COARSE AGGREGATE:

Testing of Coarse Aggregate used in Bituminous Concrete.
ject*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, u Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01).}
: Material testing/PMC/21-22,
ort Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
ıe of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

ABLE 1.1 ;

Test conducted	Test Results	Tests Conforms to IS 2386(Part I to IV)– 1963 (Reaffirmed on 2002) & Requirements as per IS:383-1970 & M o R.T.H Specification, V Revision -2013.
Aggregate Impact Value	22.89 %	Not more than 24.00 %
Combined Flakiness and Elongation index, %	27.56 %	Not more than 35.0 %
Water absorption, %	0.42%	Not more than 2.0 %
Specific gravity	2.62	-------
Soundness	5.39%	Max. 12 % in Sodium Sulphate

he result of the materials tested meets the standards and hence can be used for the work
mple Collected Site: Synik Vihar Layout 7th Main from end Ch: 180.00m to 210.00m

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C/QC/110V-Y1/2021-22-2/BS1

Date: 31-05-2022

TEST REPORT ON BITUMINOUS MIXES :
(STABILITY OF BITUMINOUS MIX)

Sub: To determine the stability of bituminous mix for BC mix sample.
Project* Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, aidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

Table 1: Properties of BC (Gr-2) Mix

Sl. No.	Test Property	*Test results obtained by Marshall method	Requirements of Bituminous Concrete, Grade-2 as per M.o.R.T&H (V Revision)-2013 Specifications
1	Marshall Stability (75 blows) (At 60°C), kgs.	1364	900
2	Marshall Flow at 60°C, mm.	3.52	2.0 - 4.0

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Synik Vihar Layout 5th Main Ch: 63.50m to 93.50m

Page No. 1/1

A.E.E

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C/QC/110V-Y1/2021-22-2/BC3

Date: 03-06-2022

TEST REPORT ON BITUMINOUS MIXES :
(BITUMEN EXTRACTION TEST & GRADATION TEST)

ub: To determine the percentage of bitumen and gradation for BC mix sample.
roject*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, aidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
ef.: Material testing/PMC/21-22,
eport Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
lame of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

A. Type of Construction : **Bituminous Concrete**

1. The bitumen content obtained after subjecting the sample for Bitumen Extraction test = **5.43 %**

2. **Gradation Test**

TABLE 1.1

Sieve Size, mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Gradation requirement as per Table 500-17 of MORTH Specfications-2013 BC (Grading - 2)
19.0	100	100
13.2	96.35	90-100
9.5	81.20	70-88
4.75	64.95	53-71
2.36	55.40	42-58
1.18	42.70	34-48
0.600	34.05	26-38
0.300	22.35	18-28
0.150	16.85	12-20
0.075	5.20	4-10

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Kenchenahalli Main Road Ch: 9.30m to 23.30m

A.E.E

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C/QC/110V-Y1/2021-22-2/D1

Date: 05-05-2022

TEST REPORT ON DRY LEAN CONCRETE

(GRADATION TEST)

Sub: To conduct Gradation test on Dry Lean Concrete (DLC) Mix.
Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
26.50	100	100
19.00	92.60	75-95
9.50	65.10	50-70
4.75	49.25	30-55
2.36	34.90	17-42
0.600	18.55	8-22
0.300	15.40	7-17
0.150	10.25	2-12
0.075	7.45	0-10

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Harohalli 6th cross Ch: 26.00m to 56.00m

A.E.E

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SC/QC/110V-Y1/2021-22-2/D3

Date: 06-05-2022

TEST REPORT ON DRY LEAN CONCRETE

(GRADATION TEST)

Sub: To conduct Gradation test on Dry Lean Concrete (DLC) Mix.
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

TEST RESULTS

1. Gradation Test:

TABLE 1.1

Sieve Size mm	Percent by Weight passing the Sieve from the sample supplied (Obtained Gradation)	Specified Limits as per MoRTH Specifications, V Revision-2013
26.50	100	100
19.00	87.55	75-95
9.50	64.15	50-70
4.75	48.35	30-55
2.36	36.80	17-42
0.600	19.05	8-22
0.300	15.25	7-17
0.150	9.45	2-12
0.075	6.10	0-10

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Surya Vamshi Layout Opp. DS Max Appt Ch: 30.00m to 51.00m

AE

A.E.E

SILICON CONSULTING ENGINEERS

#S1317, 4th CROSS BEL 2nd STAGE BHARATH NAGAR ,BANGALORE – 560 091. CELL : 9448353883
E-mail siliconcivilengineers@gmail.com

SC/QC/110V-Y1/2021-22-2/CR1

Date: 14-05-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 07days Compressive Strength).
{Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE

CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{30}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	07-05-22	14-05-22	07	22500	515	22.89	**23.41**
	002	"	"	"	"	540	24.00	
	003	"	"	"	"	525	23.33	

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Surya Vamshi Layout Surround Ashwath Katte Ch: 0.00m to 29.90m

AE-02

A.E.E

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SILICON
CONSULTING ENGINEERS

C/QC/110V-Y1/2021-22-2/CR3

Date: 16-05-2022

TEST REPORT ON CEMENT CONCRETE CUBES:

ub. Testing of Concrete Cubes (for 07days Compressive Strength).
roject*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, udu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
ef.: Material testing/PMC/21-22,
eport Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
ume of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{30}

BLE 1.1:

Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
001	09-05-22	16-05-22	07	22500	530	23.56	23.33
002	"	"	"	"	530	23.56	
003	"	"	"	"	515	22.89	

e result of the materials tested meets the standards and hence can be used for the work
mple Collected Site: Harohalli 6th cross Ch: 56.00m to 86.00m

16-05-22

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E-mail siliconcivilengineers@gmail.com

SC/QC/110V-Y1/2021-22-2/CR1A

Date: 04-06-2022

. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	07-05-22	04-06-22	28	22500	730	32.44	32.59
	002	"	"	"	"	745	33.11	
	003	"	"	"	"	725	32.22	

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Surya Vamshi Layout Surround Ashwath Katte Ch: 0.00m to 29.90m

AE-02

A.E.E

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CONSULTING ENGINEERS

C/QC/110V-Y1/2021-22-2/CR2A

Date: 04-06-2022

. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
Project*: Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, aidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
ef. Material testing/PMC/21-22,
eport Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
lame of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm

Grade of Concrete* : M_{20}

ABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	07-05-22	04-06-22	28	22500	730	32.44	32.81
	002	"	"	"	"	745	33.11	
	003	"	"	"	"	740	32.89	

The result of the materials tested meets the standards and hence can be used for the work
ample Collected Site: Harohalli 4th cross Ch: 72.40m to 102.40m

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SILICON
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SC/QC/110V-Y1/2021-22-2/CR3A

Date: 06-06-2022

1. TEST REPORT ON CEMENT CONCRETE CUBES:

Sub: Testing of Concrete Cubes (for 28days Compressive Strength).
{Project* Restoration and Improvements of Roads At Suryavamshi Layout, Synvika Vihara Layout, Sai Vihara Layout, Naidu Layout, Nagenahalli Layout And Surrounding Areas In Ward No-02 of Yelahanka Sub Division (PKG NO-01) }
Ref.: Material testing/PMC/21-22,
Report Required for: Assistant Executive Engineer,
Yelahanka Sub Division,
BBMP, Bangalore.
Name of the Agency/Contractor*: M/s A.C.R Projects , Channa Reddy, Bangalore.

RESULTS OF COMPRESSIVE STRENGTH ON CEMENT CONCRETE CUBE SPECIMENS

Dimensions of Specimen : 150 X 150 X 150mm
Grade of Concrete* : M_{20}

TABLE 1.1:

Sl No	Location/ Identification*	Date of Casting*	Date of Testing	Age in Days	C/S Area in mm^2	Maximum Load in K.N	Compressive Strength (N/mm^2)	Avg. Value
1	001	09-05-22	06-06-22	28	22500	720	32.00	32.52
	002	"	"	"	"	735	32.67	
	003	"	"	"	"	740	32.89	

The result of the materials tested meets the standards and hence can be used for the work
Sample Collected Site: Harohalli 6th cross Ch: 56.00m to 86.00m

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